



DEPARTMENT OF THE NAVY
NAVAL AIR SYSTEMS COMMAND
NAVAL AIR SYSTEMS COMMAND HEADQUARTERS
47123 BUSE ROAD, UNIT # IPT
PATUXENT RIVER, MD 20670-1547

IN REPLY REFER TO

NAVAIRINST 13920.1H
AIR-4.3.3
FEB 25 1999

NAVAIR INSTRUCTION 13920.1H

From: Commander, Naval Air Systems Command

Subj: PROCEDURES FOR SUBMITTING FLIGHT LOADS, LAUNCH, AND LANDING
DATA FOR THE STRUCTURAL APPRAISAL OF FATIGUE EFFECTS PROGRAM

- Ref: (a) Navy Management Systems Support Office Document J-004 EM-001, End User's Manual for the Naval Aviation Logistics Command Management Information System for Organizational Maintenance Activities
(b) Naval Aviation Depot Cherry Point Letter Serial Number 35320-JM, Implementation of Maintenance Requirement Cards for the Counting Accelerometer Group
(c) Naval Air Systems Command Report Control Symbol 13920-T/M/S, Structural Appraisal of Fatigue Effects Report Series

- Encl: (1) Listing of Abbreviations and Acronyms
(2) Listing of Navy Flight Loads Data Recorders
(3) Listing of Commercial, Off-The-Shelf Aircraft and Their Reporting Requirements
(4) Instructions for Preparing and Submitting Flight Loads, Launch, and Landing Records Using NALCOMIS OMA and SALTS
(5) Instructions for Preparing and Submitting NAVAIR 13920/1 (Rev. 8/98), Flight Loads/Launch/Landing Data

1. Purpose. To establish the policy and procedures needed to prepare and submit flight and ground loads data for all Navy fixed-wing and rotary-wing Type/Model/Series (T/M/S) aircraft.

2. Cancellation. This instruction supersedes Naval Air Systems Command (NAVAIR) Instruction 13920.1G of 20 October 1997. Because this is a major revision, changes have not been indicated.

3. Scope. This instruction applies to all active Naval Aircraft Reporting Custodians (Naval Aviation Depots (NAVAVNDEPOTs), Naval Air Warfare Centers (NAVAIRWARCENs), Type Commanders (TYCOMs), and Fleet Support Teams (FSTs)).

4. Discussion. The Navy has established a fleet-wide flight loads monitoring program using Flight Loads Data Recorders (FLDRs) and other related flight usage information. Enclosure (1)

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lists common abbreviations and acronyms. Enclosure (2) lists the FLDRs used on each of the Navy's fixed-wing and rotary-wing aircraft. The data obtained from this program provide the Structural Appraisal of Fatigue Effects (SAFE) program with the information necessary for:

- a. determining maximum individual aircraft and/or dynamic component retirement time while maintaining safety margins;
- b. determining time for rotation out of severe service usage to optimize aircraft utilization over its service life;
- c. identifying and monitoring individual aircraft accumulating severe or excessive load occurrences and aircraft with unusually high fatigue damage accumulation rates;
- d. recognizing changes in service usage trends;
- e. projecting aviation inventory levels that motivate test and modification/improvement plans and influence acquisition strategy;
- f. providing information affecting depot level maintenance schedules, Aircraft Service Periods Adjustments, in-service structural inspection intervals, and modification inductions; and
- g. establishing design requirements for future naval aircraft.

5. Policy

- a. This instruction is applicable to all Navy owned and/or operated aircraft (fixed-wing and rotary-wing). Enclosure (3) lists exceptions to the reporting requirements of this instruction for certain commercial, off-the-shelf aircraft, as specified in writing by the program manager.
- b. Frequency and procedures for submitting monthly reports, conditional reports, and FLDR data are detailed in paragraph 6 and enclosures (4) and (5) of this instruction.

6. Action. Naval Aviation Logistics Command Management Information System for Organizational Maintenance Activities (NALCOMIS OMA) (version 03.01.00 or higher) and the Streamlined Automated Logistics Transmission System (SALTS) (version 3.0 or higher) are the preferred means for reporting flight loads, launch, and landing data. Reporting custodians shall utilize NALCOMIS OMA and SALTS as their means to submit data whenever available. Reporting custodians shall utilize NAVAIR 13920/1 (Rev 8/98), Flight Loads/Launch/Landing Data, only when NALCOMIS OMA and SALTS are unavailable.

NOTE: Reporting custodians may have to perform several reporting actions each month (e.g., complete and submit monthly data, complete and submit any FLDR removal reports, and download and submit FLDR data).

a. Reporting custodians utilizing NALCOMIS OMA and SALTS shall submit Flight Loads, Launch, and Landing Records (FLLLR) as detailed in reference (a) and enclosure (4) by

(1) the fifth day following the end of each month for each aircraft under their cognizance; and

(2) the fifth day following any FLDR removal, installation, strain gage calibration, or strain gage change.

b. Reporting custodians not utilizing NALCOMIS OMA and SALTS shall, for each aircraft under their cognizance, complete NAVAIR 13920/1 as detailed in enclosure (5) by

(1) the fifth day following the end of each month for each aircraft under their cognizance; and

(2) the fifth day following any FLDR removal, installation, strain gage calibration, or strain gage change.

c. Reporting custodians with fixed-wing aircraft equipped with Counting Accelerometer Groups (CAGs) shall check for the malfunction conditions as detailed in local instructions for each indicator reading and take corrective action as required. Reporting custodians shall submit results of any testing performed on a CAG in the remarks section of either NAVAIR 13920/1 (Rev. 8/98) or the Aircraft Readings display when using NALCOMIS OMA.

d. Reporting custodians with aircraft equipped with multiple parameter FLDRs shall download the FLDR and submit the data following local instructions. Submit all 3½-inch disks or 9-track tape reels to the Aircraft Structural Life Surveillance Branch (AIR-4.3.3.4) at the address in paragraph 7.

e. Depots shall comply with paragraph 6a through 6d, as applicable, for all aircraft upon induction into rework (commercial or government depot). All FLDR data collected during a depot rework cycle, including all check flights, shall be downloaded and submitted following local instructions. Submit all 3½-inch disks or 9-track tape reels to AIR-4.3.3.4.

f. FSTs shall:

(1) ensure that FLDRs are properly functioning while installed on an aircraft;

(2) update the Maintenance Requirement Cards (MRC) for aircraft equipped with the Systron-Donner CAG to provide for routine test and check using the AN/ASM-688 CAG test set. Refer to reference (b) for additional information and guidelines for establishing intervals; and

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(3) coordinate with the Depot Maintenance Interservice Support Agreement (DMISA) manager to incorporate reporting requirements into the DMISA (exhibit VII-A or XVII) and DMISA reports (exhibit X) and negotiate the new reporting requirements with the DMISA agent.

g. AIR-4.3.3.4 shall provide summaries to the TYCOMs confirming data receipt with FLDR functional status for every aircraft. Letters or messages shall be provided every quarter for aircraft equipped with CAGs and every month for aircraft equipped with multiple parameter FLDRs. Aircraft fatigue and usage information shall be promulgated through reference (c).

h. TYCOMs shall ensure that reporting custodians take corrective action to identify then repair or replace malfunctioning FLDRs.

i. Program Managers shall ensure that commercial contractors under their cognizance that perform depot-level rework comply with the subparagraph 6a through 6d instructions listed for government depot-level rework facilities.

7. Change Recommendations. AIR-4.3.3.4 solicits useful comments and recommendations for changes to the procedures and form contained in this instruction. Please forward ideas for changes to the following:

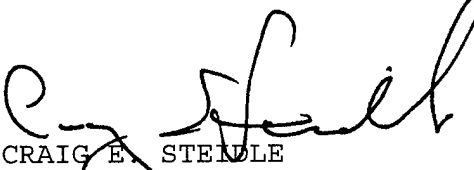
AIRCRAFT STRUCTURAL LIFE SURVEILLANCE BRANCH
ATTN: AIR-4.3.3.4 BLDG 2187 SUITE 2320A
NAVAL AIR SYSTEMS COMMAND
48110 SHAW ROAD UNIT 5
PATUXENT RIVER, MD 20670-1906

Phone: Commercial (301) 342-9323 (DSN 342-9323)

FAX: Commercial (301) 342-9406 (DSN 342-9406)

8. Forms. NAVAIR 13920/1 (Rev. 8/98), Flight Loads/Launch/ Landing Data, S/N 0102-LF-994-2300, shall be ordered per CDROM NAVSUP Pub 600 (NLL). Previous versions of this form may be used only if the preprinted address is replaced with the address in paragraph 7.

9. Review. Structures Division (AIR-4.3.3) shall review annually the contents herein and provide recommendations for changes to the Commander.


CRAIG E. STENLE
Acting

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Listing of Abbreviations and Acronyms

ADRS	- Airborne Data Recording System
BUNO	- Bureau Number
CAG	- Counting Accelerometer Group
CATS	- Catapult Launches
CG	- Center of Gravity
DMISA	- Depot Maintenance Interservice Support Agreement
DSS	- Data Storage Set
ECAMS	- Enhanced Comprehensive Assets Management System
ETI	- Elapsed Time Indicator
FCLP	- Field Carrier Landing Practice
FDIR	- Flight Data Incident Recorder
FEMS	- Fatigue and Engine Monitoring System
FIRAMS	- Flight Incident Recording and Monitoring System
FLDR	- Flight Loads Data Recorder (generic term)
FLLR	- Flight Loads, Launch, Landing Report
FST	- Fleet Support Team
MRC	- Maintenance Requirement Card
MSDRS	- Maintenance Signal Display and Recording System
NAVAVNDEPOT	- Naval Aviation Depot
NALCOMIS	- Naval Aviation Logistics Command Management Information System
NATOPS	- Naval Air Training and Operating Procedures Standardization
NAVAIR	- Naval Air Systems Command
NAVFLIR	- Naval Aircraft Flight Record
NAVAIRWARCEN	- Naval Air Warfare Center
OMA	- Organizational Maintenance Activities
RAST	- Recovery Assist, Secure, and Traverse
SAFE	- Structural Appraisal of Fatigue Effects
SALTS	- Streamlined Automated Logistics Transmission System
SDRS	- Structural Data Recording Set
T & G	- Touch & Go
T/M/S	- Type/Model/Series
TRF	- Total Rounds Fired
TYCOM	- Type Commander
VSLED	- Vibration, Structural Life, and Engine Diagnostics
VSTOL	- Vertical/Short Take-Off and Landing
WRA	- Weapon Replaceable Assembly

Listing of Navy Flight Loads Data Recorders

AIRCRAFT T/M/S	FLIGHT LOADS DATA RECORDER	NOMENCLATURE/ PART NUMBER
AH-1W	SDRS	AN/ASH-37(V)
AV-8B (day)	Mission Computer	
AV-8B (night)	DSS	
A-4 (ALL T/M/S)	CAG	MS25448, MS25447-7
A-7 (ALL T/M/S)	CAG	MS25448, MS25447-7
H-46 (ALL T/M/S)	None	
H-53 (ALL T/M/S)	None	
C-2A(R)	CAG SDRS	ABU-20/A, TRU-162/A AN/ASH-37(V)
C-130 (except LC-130F/R)	SDRS	AN/ASH-37(V)
EA-6B	CAG SDRS	MS25448, MS25447-6 AN/ASH-37(V)
E-2C	SDRS	AN/ASH-37(V)
E-6A/B	CAG FDIR	ABU-20/A, TRU-162/A AN/ASH-40
FA-18A/B	MSDRS	
FA-18C/D/E/F	FIRAMS	
QF-4N	CAG	MS25448, MS25447-6
F-5E/F	CAG	ABU-15/A, TRU-138/A
F-14A	SDRS	AN/ASH-37(V)
F-14B/D	FEMS	
LC-130F/R	None	
P-3 (ALL T/M/S)	CAG SDRS	MS25448, MS25447-1 AN/ASH-37(V)
SH-2 (ALL T/M/S)	None	
SH-3 (ALL T/M/S)	None	
H-60 (ALL T/M/S)	None	
S-3 (ALL T/M/S)	CAG SDRS	MS25448, MS25447-1 AN/ASH-37(V)
T-2 (ALL T/M/S)	CAG	MS25448, MS25447-7
T-38 (ALL T/M/S)	None	
T-45	ADRS	
UC-8A	None	
H-1 (except AH-1W)	None	
U-6A	None	
V-22	VSLED	
X-26A	None	

Listing of Commercial, Off-The-Shelf Aircraft and Their Reporting Requirements

T-34C	Custodians <u>are not</u> required to comply with the content of this instruction
T-44A	Custodians <u>are not</u> required to comply with the content of this instruction
C-9, DC-9	Custodians <u>are not</u> required to comply with the content of this instruction
C-20D/G	Custodians <u>are not</u> required to comply with the content of this instruction
CT-39E/G	Custodians <u>are not</u> required to comply with the content of this instruction
TC-4C	Custodians <u>are not</u> required to comply with the content of this instruction
TH-57	Custodians <u>are not</u> required to comply with the content of this instruction
UC-12B/F/M	Custodians <u>are not</u> required to comply with the content of this instruction
TC-18F	Custodians <u>are not</u> required to comply with the content of this instruction
TH-6B	Custodians <u>are not</u> required to comply with the content of this instruction

Instructions for Preparing and Submitting Flight Loads, Launch, and Landing Records Using
NALCOMIS OMA and SALTS

CAUTION: NALCOMIS OMA will format each disk prior to creating any FLLLR file for submission via SALTS. Therefore, reporting custodians can generate only one FLLLR file (Monthly, FLDR Removed, FLDR Installed, Strain Gage Calibration, or Strain Gage Change) per disk. Disks shall be reused after the FLLLR files are transmitted via SALTS.

All FLLLR files generated using NALCOMIS OMA must have the filename “*CAG.DAT”, where * is the reporting activity’s 3M organization code. If this filename is not used then the data will not be transmitted to AIR-4.3.3.4.

1. Upon closeout of the flight schedule on the last day of each month all reporting custodians shall generate monthly FLLLRs for all naval aircraft under their custody (fixed-wing and rotary-wing), with or without an operating or installed FLDR, as described below:

NOTE: Monthly reports cover the period from 0000 of the first day of the month through 2359 of the last day of the month.

- a. Access NALCOMIS OMA, choose the “Logs and Records” menu item, and then choose the “Flight Loads, Launch, and Landing Reporting” menu item.
- b. Select “MONTHLY” as the report type and complete the subsequent screens.
- c. Repeat subparagraph 1b. for all aircraft.
- d. Access NALCOMIS OMA with administrator privileges and choose the “NALCOMIS Applications Administration” menu item, then the “Interface Functions” menu item, and then the “FLLLR” menu item.
- e. Select MONTHLY as the report Type and create the *CAG.DAT FLLLR file on a diskette.
- f. From the SALTS MAIN MENU, select the “Prepare a File for Transmission” menu item, choose the “AV-3M & Hazmat Data” menu item, choose the “AV-3M XRAY/FLLLR/RT79/LOSMAF Data” menu item and select the *CAG.DAT file to be transmitted.
- g. From the SALTS MAIN MENU, choose the “Send or Receive Files Now” menu item to connect to SALTS Central and automatically transmit the *CAG.DAT file.

2. Upon completion of an FLDR removal the reporting custodian shall:

- a. access NALCOMIS OMA, choose the “Logs and Records” menu item, and then choose the “Flight Loads, Launch, and Landing Reporting” menu item;

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- b. select "FLDR Removed" as the report type and complete the subsequent screens;
 - c. repeat subparagraph 2b for all aircraft with FLDR removals;
 - d. access NALCOMIS OMA with administrator privileges and choose the "NALCOMIS Applications Administration" menu item, then the "Interface Functions" menu item, and then the "FLLLR" menu item;
 - e. select "FLDR Removed" as the report Type and create the *CAG.DAT FLLLR file on a diskette;
 - f. access SALTS, from the SALTS MAIN MENU select the "Prepare a File for Transmission" menu item, choose the "AV-3M & Hazmat Data" menu item, choose the "AV-3M XRAY/FLLLR/RT79/LOSMAF Data" menu item and select the *CAG.DAT file to be transmitted; and
 - g. from the SALTS MAIN MENU, choose the "Send or Receive Files Now" menu item to connect to SALTS Central and automatically transmit the *CAG.DAT file.
3. Upon completion of an FLDR installation the reporting custodian shall
- a. access NALCOMIS OMA, choose the "Logs and Records" menu, item and then choose the "Flight Loads, Launch, and Landing Reporting" menu item;
 - b. select "FLDR Installed" as the report type and complete the subsequent screens;
 - c. repeat subparagraph 3b for all aircraft with FLDR installs;
 - d. access NALCOMIS OMA with administrator privileges and choose the "NALCOMIS Applications Administration" menu item, then the "Interface Functions" menu item, and then the "FLLLR" menu item;
 - e. select "FLDR Installed" as the report Type and create the FLLLR file on a diskette;
 - f. access SALTS, from the SALTS MAIN MENU select the "Prepare a File for Transmission" menu item, choose the "AV-3M & Hazmat Data" menu item, choose the "AV-3M XRAY/FLLLR/RT79/LOSMAF Data" menu item and select the *CAG.DAT file to be transmitted; and
 - g. from the SALTS MAIN MENU, choose the "Send or Receive Files Now" menu item to connect to SALTS Central and automatically transmit the *CAG.DAT file.

4. Upon completion of a strain gage calibration the reporting custodian shall:
 - a. access NALCOMIS OMA, choose the "Logs and Records" menu item, and then choose the "Flight Loads, Launch, and Landing Reporting" menu item;
 - b. select "Strain Gage Calib" as the report type and complete the subsequent screens;
 - c. repeat subparagraph 4.b. for all aircraft with strain gage calibrations;
 - d. access NALCOMIS OMA with administrator privileges and choose the "NALCOMIS Applications Administration" menu item, then the "Interface Functions" menu item, and then the "FLLLR" menu item;
 - e. select "Strain Gage Calib" as the report Type and create the *CAG.DAT FLLLR file on a diskette;
 - f. access SALTS, from the SALTS MAIN MENU select the "Prepare a File for Transmission" menu item, choose the "AV-3M & Hazmat Data" menu item, choose the "AV-3M XRAY/FLLLR/RT79/LOSMAF Data" menu item and select the *CAG.DAT file to be transmitted; and
 - g. from the SALTS MAIN MENU, choose the "Send or Receive Files Now" menu item to connect to SALTS Central and automatically transmit the *CAG.DAT file.
5. Upon completion of a strain gage change the reporting custodian shall:
 - a. access NALCOMIS OMA, choose the "Logs and Records" menu item, and then choose the "Flight Loads, Launch, and Landing Reporting" menu item;
 - b. select "Strain Gage Change" as the report type and complete the subsequent screens;
 - c. repeat subparagraph 5.b. for all aircraft with strain gage changes;
 - d. access NALCOMIS OMA with administrator privileges and choose the "NALCOMIS Applications Administration" menu item, then the "Interface Functions" menu item, and then the "FLLLR" menu item;
 - e. select "Strain Gage Change" as the report Type and create the *CAG.DAT FLLLR file on a diskette;

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f. access SALTS, from the SALTS MAIN MENU select the "Prepare a File for Transmission" menu item, choose the "AV-3M & Hazmat Data" menu item, choose the "AV-3M XRAY/FLLLR/RT79/LOSMAF Data" menu item and select the *CAG.DAT file to be transmitted; and

g. from the SALTS MAIN MENU, choose the "Send or Receive Files Now" menu item to connect to SALTS Central and automatically transmit the *CAG.DAT file.

Instructions for Preparing and Submitting NAVAIR 13920/1 (Rev. 8/98), Flight
Loads/Launch/Landing Data

1. **Attachment (A) (NAVAIR 13920/1 (Rev. 8/98)) shall be completed as described below for all naval aircraft (fixed-wing and rotary-wing) with or without an operating or installed FLDR. Obtain data for completion of subparagraphs 3e through 3l from OPNAV 4790/21A (Rev. 2/86), Monthly Flight Summary Forms (Aircraft Logbook).**

NOTE: Submit NAVAIR 13920/1 (Rev. 8/98) only when NALCOMIS OMA 03.01.00 or higher and SALTS 3.0 or higher are not available.

2. **REPORT TYPE.** Check the appropriate box indicating the type of report that is being submitted. The report types are:

a. **MONTHLY.** Monthly reports cover the period from 0000 of the first day of the month through 2359 of the last day of the month and shall be submitted to AIR-4.3.3.4 no later than 5 days following the end of the month covered by the report. Complete Parts A and B for all monthly reports. The following are conditions for monthly reports:

(1) Reports are required for all naval aircraft, with exceptions noted in enclosure (3). If the FLDR is removed, is inoperative, or has not yet been installed, then only Part A needs to be completed.

(2) Reports are required even if FLDR removal/ installation or strain gage calibration/change reports were submitted during the month.

b. **FLDR REMOVED.** Complete Part A for all FLDR removal reports. FLDR removal includes the removal of any or all Weapon Replaceable Assemblies (WRAs) (except for WRAs removed for routine download) that, in effect, renders the system inoperable. The information in Part A shall be current up to the removal of the FLDR. Also, complete Part B, per paragraph 4 of this enclosure, if the CAG (transducer and/or indicator) was removed. Reports are to be submitted within 5 days of the removal.

c. **FLDR INSTALLED.** Complete Part A for all FLDR installation reports. FLDR installation includes the hooking up of any or all FLDR WRAs that, in effect, renders the system operable. The information in Part A shall be current up to the installation of the FLDR. Complete Part B, per paragraph 4 of this enclosure, if the CAG (transducer and/or indicator) was installed. Reports are to be submitted within 5 days of the installation.

d. **STRAIN GAGE CALIBRATION.** Currently, only FA-18 aircraft require strain gage calibrations. Check flight requirements are available in the NATOPS Flight Manual. Complete Part A and Part C for calibration reports for any FA-18 strain gage calibration. The information in Part A shall be current up to the calibration of the gage(s). Refer to paragraph 5 of this enclosure for instructions on completing a strain gage calibration report. Reports are due within

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5 days of the calibration.

NOTE: Until assigned, calibration reports are not required for other T/M/S aircraft.

e. **STRAIN GAGE CHANGE**. For all fixed-wing aircraft with strain gages, complete Part A and Part D for any strain gage change report within 5 days of the change. The information in Part A shall be current up to the gage change. Change reports are not required from rotary-wing reporting custodians until procedures are provided as an update to this instruction.

NOTE: Strain gages may fail for a variety of reasons. Failures may be detected by inspection, by analysis of the output data at the ground station, or by detailed analysis of the output using quality control computer programs at AIR-4.3.3.4.

3. **PART A of NAVAIR 13920/1 (Rev. 8/98) shall be completed as described below. This region of NAVAIR 13920/1 (Rev. 8/98) must be filled with ALL-TIME TOTALS (SINCE AIRCRAFT MANUFACTURE) AND NOT THE MONTHLY ACCUMULATED LANDINGS OR FLIGHT HOURS.**

a. **REPORT DATE**. For a monthly report, enter the date of the last day of the month covered by the report. For a FLDR removal/ installation or strain gage calibration/change report, enter the date of occurrence.

b. **AIRCRAFT T/M/S**. Enter the T/M/S of the aircraft covered by the report (e.g., T-34C, F-14A, AH-1W).

c. **AIRCRAFT BUNO**. Enter the Bureau Number (BUNO) of the aircraft covered by the report.

d. **REPORTING ACTIVITY/ORGANIZATIONAL CODE**. Enter the designation of the aircraft reporting activity (e.g., HMLA-269, VAW-88, NAVAVNDEPOT NORTH ISLAND, Defense Plant Representative Office, Bethpage).

e. **SHIP ARRESTS**. Complete this block as follows:

(1) For fixed-wing aircraft (except the AV-8B), enter the total number of ship arrestments since aircraft manufacture. This value shall not include the number of field arrestments experienced by the aircraft.

(2) For the AV-8B, enter the total number of ship landings since aircraft manufacture.

(3) For rotary-wing aircraft, enter the total number of ship landings since aircraft manufacture.

f. **SHIP T & G**. Complete this block as follows:

(1) For fixed-wing aircraft (except the AV-8B), enter the total number of ship Touch & Go (T & G) occurrences since aircraft manufacture.

(2) For the AV-8B, enter the total number of Vertical/Short Take-Off and Landings (VSTOL VERT) since aircraft manufacture.

(3) For rotary-wing aircraft, enter the total number of ship T & G occurrences since aircraft manufacture.

g. **SHIP BOLTERS**. Complete this block as follows:

(1) For fixed-wing aircraft (except the AV-8B), enter the total number of ship bolters since aircraft manufacture.

(2) For the AV-8B, enter the total number of short field landings (VSTOL SLOW) since aircraft manufacture.

(3) For all rotary-wing aircraft, leave blank.

h. **FIELD ARRESTS**. Complete this block as follows:

(1) For fixed-wing aircraft (except the AV-8B), enter the total number of field arrestments since aircraft manufacture. This value shall not include the number of ship arrestments undergone by the aircraft.

(2) For the AV-8B, enter the total number of rolling vertical landings (VSTOL VERT ROLL) since aircraft manufacture.

(3) For all rotary-wing aircraft, leave blank.

i. **FCLP/RAST**. Complete this block as follows:

(1) For fixed-wing aircraft (including the AV-8B), enter the total number of Field Carrier Landing Practices (FCLPs) since aircraft manufacture.

(2) For rotary-wing aircraft, enter the total number of Recovery Assists, Secures, and Traverses (RASTs) since aircraft manufacture.

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j. **FIELD LANDINGS**. Complete this block as follows:

(1) For fixed-wing aircraft (including the AV-8B), enter the total number of field landings (field T & G and full stop) since aircraft manufacture.

(2) For rotary-wing aircraft, enter the total number of field landings since aircraft manufacture.

k. **TOTAL LANDINGS**. For all aircraft (fixed-wing and rotary-wing), enter the total number of landings since aircraft manufacture. This value shall be the sum of the numbers entered in paragraphs 3e through 3j.

l. **SHIP/FLD CATS**. Complete this block as follows:

(1) For fixed-wing aircraft (except the AV-8B), enter the total number of ship and field catapults since aircraft manufacture.

(2) For the AV-8B, enter the Total Rounds Fired (TRF) on the airframe.

(3) For all rotary-wing aircraft, leave blank.

m. **TOTAL AIRCRAFT FLIGHT TIME**. Enter the total number of flight hours and tenths of hours since aircraft manufacture.

3. PART B of NAVAIR 13920/1 (Rev. 8/98) must be completed as described below if the aircraft is equipped with a CAG. See enclosure (2) for a complete list of aircraft equipped with CAGs.

NOTE: NAVAIR 13920/1 (Rev. 8/98) is required even if the CAG has been replaced with the Structural Data Recording Set (SDRS) (AN/ASH-37(V)).

a. For aircraft with four level CAGs, enter the four window readings in locations 1 through 4.

b. The AV-8B aircraft utilizes the mission computer and displays eleven loads. Enter the eleven window readings displayed in the cockpit in blocks 1 through 11.

c. The C-2A(R), E-6A, and F-5E/F aircraft are equipped with CAGs that record six load levels and an Elapsed Time Indicator (ETI). Enter the seven window readings in blocks 1 through 7, with window 7 being the ETI.

d. For the AH-1W, enter the number of hours and tenths of hours flown in the following configurations:

- Block 1: Left wing Hellfire flight hours.
- Block 2: Left wing other stores/fuel tank flight hours.
- Block 3: Left wing clean wing flight hours.
- Block 4: Right wing Hellfire flight hours.
- Block 5: Right wing other stores/fuel tank flight hours.
- Block 6: Right wing clean wing flight hours.

e. For all other rotary-wing aircraft, leave the counting accelerometer readings blank.

f. For CAG removal/installation reports, enter the final or initial readings from the CAG windows.

5. **REMARKS.** Enter appropriate pertinent remarks (e.g., noting the transfer or receipt of an aircraft, or the aircraft was stricken).

6. **PART C of NAVAIR 13920/1 (Rev. 8/98) must be completed as described below if the report type is a Strain Gage Calibration.**

NOTE: **PART C** currently applies only to FA-18 aircraft. Check flight requirements are available in the NATOPS Flight Manual. For other T/M/S aircraft with strain gages, calibration techniques shall be assigned and detailed as an update to this instruction. Until assigned, calibration reports are not required for other T/M/S aircraft.

a. **REASON.** Check the appropriate box indicating the reason for the calibration. The reasons for calibration are:

(1) **RECOMMENDED.** When requested by AIR-4.3.3.4 to perform a calibration check flight due to anomalies in the data.

(2) **GAGE REPLACED.** Whenever the strain gage or its wiring is replaced. Include in the remarks section a brief description of the action taken.

(3) **ROUTINE.** Required on a periodic basis to detect and compensate for possible changes in strain gage calibration. If required for a specific T/M/S, details shall be contained in the appropriate MRC deck.

(4) **OTHER.** Whenever a calibration check flight is performed for any other reason. Include details in the remarks section.

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b. **EXTERNAL STORES WEIGHTS (LBS)**. Enter the weight of any external stores, including racks and pylons, at each stores station during the calibration check flight.

c. **FLIGHT EVENT NUMBER**. For FA-18 aircraft with Enhanced Comprehensive Assets Management System (ECAMS) (versions 1.6 and higher), enter the flight event number of the calibration check flight listed on the corresponding Naval Aircraft Flight Record (NAVFLIR). For other T/M/S aircraft enter which flight of the day the calibration check was performed (e.g., first, second, third).

d. **TAKE-OFF WEIGHT (LBS)**. Enter the total take-off weight (in pounds) of the aircraft at the time of the launch of the calibration check flight.

e. **TAKE-OFF CG (IN.)**. Enter the take-off Center of Gravity (CG) (measured in inches) of the aircraft at the time of the launch of the calibration check flight.

f. **LANDING WEIGHT**. Enter the total weight of the aircraft at recovery from the calibration check flight.

g. **FLIGHT DURATION (HOURS)**. Enter the time in hours and tenths of hours that the calibration check flight lasted.

7. PART D of NAVAIR 13920/1 (Rev. 8/98) must be completed as described below if the report type is a Strain Gage Change.

NOTE: **PART D** currently applies to all fixed-wing aircraft using FLDRs with strain gages. Procedures for rotary-wing aircraft strain gage change reports shall be provided as an update to this instruction. Until provided, change reports are not required for rotary-wing aircraft.

a. **REASON**. Check the appropriate box indicating the reason for the change. The reasons for change are:

(1) **RECOMMENDED**. When requested by AIR-4.3.3 to change the strain gage due to anomalies in the data.

(2) **DISBONDED**. Whenever a strain gage is replaced or the alternate strain gage is activated due to disbonding discovered during inspection.

(3) **CONTINUITY**. Whenever a strain gage is replaced or the alternate strain gage is activated due to circuit continuity check failure.

(4) **ZERO DRIFT**. Whenever a strain gage is replaced or the alternate strain gage is activated due to excessive zero value drift revealed by data processing ground station checks.

b. **LOCATION.** Check whether the primary "P" or backup "B" strain gage was activated or replaced. Check only those strain gage locations affected by the strain gage change. The following are the locations for the FA-18A/B/C/D gages:

- 1 – Wing Root (WR)
- 2 – Wing Fold (WF)
- 3 – Left Horizontal Tail (LH)
- 4 – Right Horizontal Tail (RH)
- 5 – Left Vertical Tail (LV)
- 6 – Right Vertical Tail (RV)
- 7 – Forward Fuselage (FF)

8. **DATA SUBMISSION.** Insert all magnetic tapes and disks in padded envelopes and mail, along with all reports, to AIR-4.3.3.4.

9. **EXAMPLE FORMS.** See the attached example forms for assistance in completing NAVAIR 13920/1 (Rev. 8/98).

- a. Attachment (A) is a blank sample of NAVAIR 13920/1 (Rev. 8/98).
- b. Attachment (B) is a sample of a properly completed NAVAIR 13920/1 (Rev. 8/98) for an aircraft equipped with CAG.
- c. Attachment (C) is a sample of a properly completed NAVAIR 13920/1 (Rev. 8/98) for the AV-8B aircraft.
- d. Attachment (D) is a sample of a properly completed NAVAIR 13920/1 (Rev. 8/98) for the FA-18. A properly completed F-14B/D report shall be similar to the FA-18 report.
- e. Attachment (E) is a sample of a properly completed NAVAIR 13920/1 (Rev. 8/98) for an FA-18 strain gage calibration.
- f. Attachment (F) is a sample of a properly completed NAVAIR 13920/1 (Rev. 8/98) for an FA-18 strain gage change.

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SAMPLE OF NAVAIR FORM 13920/1 (REV 8/98)

NAVAIR 13920/1 (Rev. 8/98)		FLIGHT LOADS / LAUNCH / LANDING DATA - SIDE 1				S/N 0102-LF-994-2300	
REFER TO NAVAIRINST 13920.1H, ENCLOSURE (5) FOR INSTRUCTIONS ON HOW TO PROPERLY COMPLETE THIS FORM.		PART A: AIRCRAFT INFORMATION <small>TOTALS ARE SINCE AIRCRAFT MANUFACTURE</small>					
		REPORT DATE	AIRCRAFT T/M/S	AIRCRAFT BUNO	REPORTING ACTIVITY/ORGANIZATIONAL CODE		
REPORT TYPE <input type="checkbox"/> MONTHLY. <input type="checkbox"/> FLDR REMOVED. <input type="checkbox"/> FLDR INSTALLED. <input type="checkbox"/> STRAIN GAGE CALIB. <input type="checkbox"/> STRAIN GAGE CHANGE.		SHIP ARRESTS AV-8: TOTAL SHIP	SHIP T & G AV-8: VSTOL VERT	SHIP BOLTERS AV-8: VSTOL SLOW	FIELD ARRESTS AV-8: VSTOL VERT ROLL	TOTAL AIRCRAFT FLIGHT TIME	
		FCLP/RAST AV-8: FCLP	FIELD LANDINGS AV-8: FLD/FLD T&G	TOTAL LANDINGS	SHIP/FLD CATS AV-8: TRF		
PART B: COUNTING ACCELEROMETER WINDOW READINGS							
		1	2	3	4	5	6
		7 <small>OR ETI</small>	8	9	10	11	12
REMARKS							
NAVAIRHQ DIRECTIVES WEB SITE: HTTP://www.nalda.navy.mil/instructions/default.cfm PREVIOUS ISSUES OF THIS FORM MAY BE USED UNTIL DEPLETED.							

NAVAIR 13920/1 (Rev. 8/98)		FLIGHT LOADS / LAUNCH / LANDING DATA - SIDE 2				S/N 0102-LF-994-2300			
STRAIN GAGE CALIBRATION REPORT - <i>Part A on Side 1 must also be completed.</i>									
C	REASON	EXTERNAL STORES WEIGHTS (LBS)	1	2	FLIGHT EVENT NUMBER				
	<input type="checkbox"/> RECOMMENDED.		3	4	TAKE-OFF WEIGHT (LBS)				
	<input type="checkbox"/> GAGE REPLACED.		5	6	TAKE-OFF CG (IN.)				
	<input type="checkbox"/> ROUTINE.		7	8	LANDING WEIGHT (LBS)				
	<input type="checkbox"/> OTHER.		9	10	FLIGHT DURATION (HOURS)				
STRAIN GAGE CHANGE REPORT - <i>Part A on Side 1 must also be completed.</i>									
D	REASON	P: Primary B: Backup	LOCATION: 1 2 3 4 5 6 7						
	<input type="checkbox"/> RECOMMENDED.		P B P B P B P B P B P B P B						
	<input type="checkbox"/> DISBONDED.		ACTIVATED: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						
	<input type="checkbox"/> CONTINUITY.		REPLACED: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						
	<input type="checkbox"/> ZERO DRIFT.								
MAIL THIS CARD TO:		AIRCRAFT STRUCTURAL LIFE SURVEILLANCE BRANCH ATTN: AIR-4.3.3.4 BLDG 2187 SUITE 2320A NAVAL AIR SYSTEMS COMMAMD 48110 SHAW ROAD UNIT 5 PATUXENT RIVER MD 20670-1906							
NAVAIRHQ DIRECTIVES WEB SITE: HTTP://www.nalda.navy.mil/instructions/default.cfm PREVIOUS ISSUES OF THIS FORM MAY BE USED UNTIL DEPLETED.									

Attachment (A)
Enclosure (5)

NAVAIRINST 13920.1H
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SAMPLE MONTHLY REPORT FOR AN AIRCRAFT EQUIPPED WITH A CAG

NAVAIR 13920/1 (Rev. 8/98)		FLIGHT LOADS / LAUNCH / LANDING DATA - SIDE 1				S/N 0102-LF-994-2300					
REFER TO NAVAIRINST 13920.1H, ENCLOSURE (5) FOR INSTRUCTIONS ON HOW TO PROPERLY COMPLETE THIS FORM.		PART A: AIRCRAFT INFORMATION									
		TOTALS ARE SINCE AIRCRAFT MANUFACTURE									
		REPORT DATE	AIRCRAFT T/M/S	AIRCRAFT BUNO	REPORTING ACTIVITY/ORGANIZATIONAL CODE						
		31DEC97	P-3C	161329	VP-65						
		SHIP ARRESTS AV-8: TOTAL SHIP	SHIP T & G AV-8: VSTOL VERT	SHIP BOLTERS AV-8: VSTOL SLOW	FIELD ARRESTS AV-8: VSTOL VERT ROLL	TOTAL AIRCRAFT FLIGHT TIME					
REPORT TYPE <input checked="" type="checkbox"/> MONTHLY. <input type="checkbox"/> FLDR REMOVED. <input type="checkbox"/> FLDR INSTALLED. <input type="checkbox"/> STRAIN GAGE CALIB. <input type="checkbox"/> STRAIN GAGE CHANGE.	FCLP/RAST AV-8: FCLP		FIELD LANDINGS AV-8: FLD/FLD T&G	TOTAL LANDINGS	SHIP/FLD CATS AV-8: TRF	8828.3					
			9100	9100							
	PART B: COUNTING ACCELEROMETER WINDOW READINGS										
	1	3175	2	2436	3	2242	4	2139	5		6
7		8		9		10		11		12	
REMARKS 											
NAVAIRHQ DIRECTIVES WEB SITE: HTTP://www.nalda.navy.mil/instructions/default.cfm PREVIOUS ISSUES OF THIS FORM MAY BE USED UNTIL DEPLETED.											

NAVAIR 13920/1 (Rev 8/98)		FLIGHT LOADS / LAUNCH / LANDING DATA - SIDE 2				S/N 0102-LF-994-2300					
STRAIN GAGE CALIBRATION REPORT - Part A on Side 1 must also be completed.											
PART C <input type="checkbox"/> RECOMMENDED. <input type="checkbox"/> GAGE REPLACED. <input type="checkbox"/> ROUTINE. <input type="checkbox"/> OTHER.	EXTERNAL STORES WEIGHTS (LBS)	1		2		FLIGHT EVENT NUMBER					
		3		4		TAKE-OFF WEIGHT (LBS)					
		5		6		TAKE-OFF CG (IN.)					
		7		8		LANDING WEIGHT (LBS)					
		9		10		FLIGHT DURATION (HOURS)					
STRAIN GAGE CHANGE REPORT - Part A on Side 1 must also be completed.											
PART D <input type="checkbox"/> RECOMMENDED. <input type="checkbox"/> DISBONDED. <input type="checkbox"/> CONTINUITY. <input type="checkbox"/> ZERO DRIFT.	P: Primary B: Backup	LOCATION: 1 2 3 4 5 6 7									
		ACTIVATED: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>									
		REPLACED: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>									
MAIL THIS CARD TO:		AIRCRAFT STRUCTURAL LIFE SURVEILLANCE BRANCH ATTN: AIR-4.3.3.4 BLDG 2187 SUITE 2320A NAVAL AIR SYSTEMS COMMMAND 48110 SHAW ROAD UNIT 5 PATUXENT RIVER MD 20670-1906									
NAVAIRHQ DIRECTIVES WEB SITE: HTTP://www.nalda.navy.mil/instructions/default.cfm PREVIOUS ISSUES OF THIS FORM MAY BE USED UNTIL DEPLETED.											

Attachment (B)
Enclosure (5)

SAMPLE MONTHLY REPORT FOR AN AV-8B AIRCRAFT

NAVAIR 13920/1 (Rev. 8/98)		FLIGHT LOADS / LAUNCH / LANDING DATA - SIDE 1				S/N 0102-LF-994-2300							
REFER TO NAVAIRINST 13920.1H, ENCLOSURE (5) FOR INSTRUCTIONS ON HOW TO PROPERLY COMPLETE THIS FORM. REPORT TYPE <input checked="" type="checkbox"/> MONTHLY. <input type="checkbox"/> FLDR REMOVED. <input type="checkbox"/> FLDR INSTALLED. <input type="checkbox"/> STRAIN GAGE CALIB. <input type="checkbox"/> STRAIN GAGE CHANGE.		PART A: AIRCRAFT INFORMATION TOTALS ARE SINCE AIRCRAFT MANUFACTURE											
		REPORT DATE	AIRCRAFT T/M/S	AIRCRAFT BUNO	REPORTING ACTIVITY/ORGANIZATIONAL CODE								
		31MAR97	AV-8B	162068	VMAT-205								
		SHIP ARRESTS AV-8: TOTAL SHIP	SHIP T & G AV-8: VSTOL VERT	SHIP BOLTERS AV-8: VSTOL SLOW	FIELD ARRESTS AV-8: VSTOL VERT ROLL	TOTAL AIRCRAFT FLIGHT TIME							
		20	700	800	420	1240.6							
		FCLP/RAST AV-8: FCLP	FIELD LANDINGS AV-8: FLD/FLD T&G	TOTAL LANDINGS	SHIP/FLD CATS AV-8: TRF								
		300	196	2436	4758								
		PART B: COUNTING ACCELEROMETER WINDOW READINGS											
		1	0000	2	0000	3	0000	4	0108	5	1129	6	0406
		7 OR ETI	0066	8	0001	9	0000	10	0000	11	0000	12	
REMARKS													
NAVAIRHQ DIRECTIVES WEB SITE: HTTP://www.nalda.navy.mil/instructions/default.cfm PREVIOUS ISSUES OF THIS FORM MAY BE USED UNTIL DEPLETED.													

NAVAIR 13920/1 (Rev. 8/98)		FLIGHT LOADS / LAUNCH / LANDING DATA - SIDE 2				S/N 0102-LF-994-2300						
STRAIN GAGE CALIBRATION REPORT - Part A on Side 1 must also be completed.												
C	REASON	EXTERNAL STORES WEIGHTS (LBS)	1		2		FLIGHT EVENT NUMBER					
	<input type="checkbox"/> RECOMMENDED.		3		4		TAKE-OFF WEIGHT (LBS)					
	<input type="checkbox"/> GAGE REPLACED.		5		6		TAKE-OFF CG (IN.)					
	<input type="checkbox"/> ROUTINE.		7		8		LANDING WEIGHT (LBS)					
	<input type="checkbox"/> OTHER.		9		10		FLIGHT DURATION (HOURS)					
STRAIN GAGE CHANGE REPORT - Part A on Side 1 must also be completed.												
D	REASON	P: Primary LOCATION: 1 2 3 4 5 6 7 B: Backup	P B		P B		P B		P B		P B	
	<input type="checkbox"/> RECOMMENDED.		ACTIVATED: <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	
	<input type="checkbox"/> DISBONDED.		REPLACED: <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	
	<input type="checkbox"/> CONTINUITY.											
<input type="checkbox"/> ZERO DRIFT.												
MAIL THIS CARD TO: AIRCRAFT STRUCTURAL LIFE SURVEILLANCE BRANCH ATTN: AIR-4.3.3.4 BLDG 2187 SUITE 2320A NAVAL AIR SYSTEMS COMMAND 48110 SHAW ROAD UNIT 5 PATUXENT RIVER MD 20670-1906												
NAVAIRHQ DIRECTIVES WEB SITE: HTTP://www.nalda.navy.mil/instructions/default.cfm PREVIOUS ISSUES OF THIS FORM MAY BE USED UNTIL DEPLETED.												

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SAMPLE MONTHLY REPORT FOR AN FA-18 AIRCRAFT (ALSO FOR THE F-14B/D)

NAVAIR 13920/1 (Rev. 8/98)		FLIGHT LOADS / LAUNCH / LANDING DATA - SIDE 1				S/N 0102-LF-994-2300	
REFER TO NAVAIRINST 13920.1H, ENCLOSURE (5) FOR INSTRUCTIONS ON HOW TO PROPERLY COMPLETE THIS FORM. <input checked="" type="checkbox"/> MONTHLY. <input type="checkbox"/> FLDR REMOVED. <input type="checkbox"/> FLDR INSTALLED. <input type="checkbox"/> STRAIN GAGE CALIB. <input type="checkbox"/> STRAIN GAGE CHANGE.		PART A: AIRCRAFT INFORMATION TOTALS ARE SINCE AIRCRAFT MANUFACTURE					
		REPORT DATE	AIRCRAFT T/M/S	AIRCRAFT BUNO	REPORTING ACTIVITY/ORGANIZATIONAL CODE		
		31MAR97	FA-18A	162853	VFA-136		
		SHIP ARRESTS AV-8: TOTAL SHIP	SHIP T & G AV-8: VSTOL VERT	SHIP BOLTERS AV-8: VSTOL SLOW	FIELD ARRESTS AV-8: VSTOL VERT ROLL	TOTAL AIRCRAFT FLIGHT TIME	
		114	22	5	1	704.5	
		FCLP/RAST AV-8: FCLP	FIELD LANDINGS AV-8: FLD/FLD T&G	TOTAL LANDINGS	SHIP/FLD CATS AV-8: TRF		
		436	573	1151	114		
PART B: COUNTING ACCELEROMETER WINDOW READINGS							
1		2	3	4	5	6	
7		8	9	10	11	12	
REMARKS							
NAVAIRHQ DIRECTIVES WEB SITE: HTTP://www.nalda.navy.mil/instructions/default.cfm PREVIOUS ISSUES OF THIS FORM MAY BE USED UNTIL DEPLETED.							

NAVAIR 13920/1 (Rev. 8/98)		FLIGHT LOADS / LAUNCH / LANDING DATA - SIDE 2				S/N 0102-LF-994-2300	
STRAIN GAGE CALIBRATION REPORT - Part A on Side 1 must also be completed.							
PART C	REASON <input type="checkbox"/> RECOMMENDED. <input type="checkbox"/> GAGE REPLACED. <input type="checkbox"/> ROUTINE. <input type="checkbox"/> OTHER.	EXTERNAL STORES WEIGHTS (LBS)	1	2	FLIGHT EVENT NUMBER		
	3		4	TAKE-OFF WEIGHT (LBS)			
	5		6	TAKE-OFF CG (IN.)			
	7		8	LANDING WEIGHT (LBS)			
	9		10	FLIGHT DURATION (HOURS)			
STRAIN GAGE CHANGE REPORT - Part A on Side 1 must also be completed.							
PART D	REASON <input type="checkbox"/> RECOMMENDED. <input type="checkbox"/> DISBONDED. <input type="checkbox"/> CONTINUITY. <input type="checkbox"/> ZERO DRIFT.	P: Primary B: Backup	LOCATION: 1 2 3 4 5 6 7 P B P B P B P B P B P B				
	ACTIVATED:						
	REPLACED:						
MAIL THIS CARD TO:		AIRCRAFT STRUCTURAL LIFE SURVEILLANCE BRANCH ATTN: AIR-4.3.3.4 BLDG 2187 SUITE 2320A NAVAL AIR SYSTEMS COMMMAND 48110 SHAW ROAD UNIT 5 PATUXENT RIVER MD 20670-1906					
NAVAIRHQ DIRECTIVES WEB SITE: HTTP://www.nalda.navy.mil/instructions/default.cfm PREVIOUS ISSUES OF THIS FORM MAY BE USED UNTIL DEPLETED.							

Attachment (D)
Enclosure (5)

NAVAIRINST 13920.1H
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SAMPLE MONTHLY REPORT FOR AN FA-18 STRAIN GAGE CALIBRATION

NAVAIR 13920/1 (Rev. 8/98)		FLIGHT LOADS / LAUNCH / LANDING DATA - SIDE 1				S/N 0102-LF-994-2300														
REFER TO NAVAIRINST 13920.1H, ENCLOSURE (5) FOR INSTRUCTIONS ON HOW TO PROPERLY COMPLETE THIS FORM.		PART A: AIRCRAFT INFORMATION TOTALS ARE SINCE AIRCRAFT MANUFACTURE																		
REPORT TYPE	18MAR97	FA-18A	162843	VFA-137																
<input type="checkbox"/> MONTHLY. <input type="checkbox"/> FLDR REMOVED. <input type="checkbox"/> FLDR INSTALLED. <input checked="" type="checkbox"/> STRAIN GAGE CALIB. <input type="checkbox"/> STRAIN GAGE CHANGE.	SHIP ARRESTS AV-8: TOTAL SHIP	SHIP T & G AV-8: VSTOL VERT	SHIP BOLTERS AV-8: VSTOL SLOW	FIELD ARRESTS AV-8: VSTOL VERT ROLL	TOTAL AIRCRAFT FLIGHT TIME															
	201	76	15	5	2451.4															
	FCLP/RAST AV-8: FCLP	FIELD LANDINGS AV-8: FLD/FLD T&G	TOTAL LANDINGS	SHIP/FLD CATS AV-8: TRF																
	756	869	1922	201																
PART B: COUNTING ACCELEROMETER WINDOW READINGS																				
<table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <tr> <td style="width: 12.5%;">1</td><td style="width: 12.5%;">2</td><td style="width: 12.5%;">3</td><td style="width: 12.5%;">4</td><td style="width: 12.5%;">5</td><td style="width: 12.5%;">6</td><td style="width: 12.5%;">7</td></tr> <tr> <td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td></td><td></td></tr> </table>							1	2	3	4	5	6	7	8	9	10	11	12		
1	2	3	4	5	6	7														
8	9	10	11	12																
REMARKS INSPECTION PERFORMED TO VERIFY FAILURE OF PRIMARY WING ROOT GAGE ON 15MAR97. PRIMARY WING ROOT GAGE REPLACED AND ACTIVATED.																				
NAVAIRHQ DIRECTIVES WEB SITE: HTTP://www.nalda.navy.mil/instructions/default.cfm PREVIOUS ISSUES OF THIS FORM MAY BE USED UNTIL DEPLETED.																				

NAVAIR 13920/1 (Rev. 8/98)		FLIGHT LOADS / LAUNCH / LANDING DATA - SIDE 2				S/N 0102-LF-994-2300										
STRAIN GAGE CALIBRATION REPORT - Part A on Side 1 must also be completed.																
C	REASON	EXTERNAL STORES WEIGHTS (LBS)	1	0	2	0	FLIGHT EVENT NUMBER	001								
	<input checked="" type="checkbox"/> RECOMMENDED.		3	2540	4	275	TAKE-OFF WEIGHT (LBS)	43470								
	<input type="checkbox"/> GAGE REPLACED.		5	2540	6	275	TAKE-OFF CG (IN.)									
	<input type="checkbox"/> ROUTINE.		7	2540	8	0	LANDING WEIGHT (LBS)	38650								
	<input type="checkbox"/> OTHER.		9	0	10	0	FLIGHT DURATION (HOURS)	0.8								
STRAIN GAGE CHANGE REPORT - Part A on Side 1 must also be completed.																
D	REASON	P: Primary B: Backup	LOCATION: 1 2 3 4 5 6 7													
	<input type="checkbox"/> RECOMMENDED.		ACTIVATED: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
	<input type="checkbox"/> DISBONDED.		REPLACED: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
MAIL THIS CARD TO:		AIRCRAFT STRUCTURAL LIFE SURVEILLANCE BRANCH ATTN: AIR-4.3.3.4 BLDG 2187 SUITE 2320A NAVAL AIR SYSTEMS COMMAND 48110 SHAW ROAD UNIT 5 PATUXENT RIVER MD 20670-1906														
		NAVAIRHQ DIRECTIVES WEB SITE: HTTP://www.nalda.navy.mil/instructions/default.cfm PREVIOUS ISSUES OF THIS FORM MAY BE USED UNTIL DEPLETED.														

Attachment (E)
Enclosure (5)

NAVAIRINST 13920.1H
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SAMPLE REPORT FOR AN FA-18 STRAIN GAGE CHANGE

NAVAIR 13920/1 (Rev. 8/98)		FLIGHT LOADS / LAUNCH / LANDING DATA - SIDE 1				S/N 0102-LF-994-2300	
REFER TO NAVAIRINST 13920.1H, ENCLOSURE (5) FOR INSTRUCTIONS ON HOW TO PROPERLY COMPLETE THIS FORM. REPORT TYPE <input type="checkbox"/> MONTHLY. <input type="checkbox"/> FLDR REMOVED. <input type="checkbox"/> FLDR INSTALLED. <input type="checkbox"/> STRAIN GAGE CALIB. <input checked="" type="checkbox"/> STRAIN GAGE CHANGE.		PART A: AIRCRAFT INFORMATION TOTALS ARE SINCE AIRCRAFT MANUFACTURE					
		REPORT DATE	AIRCRAFT T/M/S	AIRCRAFT BUNO	REPORTING ACTIVITY/ORGANIZATIONAL CODE		
		23FEB97	FA-18B	161217	VFA-137		
		SHIP ARRESTS AV-8: TOTAL SHIP	SHIP T & G AV-8: VSTOL VERT	SHIP BOLTERS AV-8: VSTOL SLOW	FIELD ARRESTS AV-8: VSTOL VERT ROLL	TOTAL AIRCRAFT FLIGHT TIME	
		185	84	25	2	2541.4	
		FCLP/RAST AV-8: FCLP	FIELD LANDINGS AV-8: FLD/FLD T&G	TOTAL LANDINGS	SHIP/FLD CATS AV-8: TRF		
		845	952	2093	185		
		PART B: COUNTING ACCELEROMETER WINDOW READINGS					
		1	2	3	4	5	6
		7	8	9	10	11	12
REMARKS ECAMS STRAIN ROOT REPORT INDICATED CONTINUITY FAILURE OF WING ROOT PRIMARY GAGE ON 20FEB97. BACKUP GAGE TERMINATED IN A PREVIOUS REPORT. WING ROOT PRIMARY GAGE REPLACED AND ACTIVATED.							
NAVAIRHQ DIRECTIVES WEB SITE: HTTP://www.nalda.navy.mil/instructions/default.cfm PREVIOUS ISSUES OF THIS FORM MAY BE USED UNTIL DEPLETED.							

NAVAIR 13920/1 (Rev. 8/98)		FLIGHT LOADS / LAUNCH / LANDING DATA - SIDE 2				S/N 0102-LF-994-2300
STRAIN GAGE CALIBRATION REPORT - Part A on Side 1 must also be completed.						
C	REASON <input type="checkbox"/> RECOMMENDED. <input type="checkbox"/> GAGE REPLACED. <input type="checkbox"/> ROUTINE. <input type="checkbox"/> OTHER.	EXTERNAL STORES WEIGHTS (LBS)	1	2	FLIGHT EVENT NUMBER	
	3		4	TAKE-OFF WEIGHT (LBS)		
	5		6	TAKE-OFF CG (IN.)		
	7		8	LANDING WEIGHT (LBS)		
	9		10	FLIGHT DURATION (HOURS)		
	STRAIN GAGE CHANGE REPORT - Part A on Side 1 must also be completed.					
D	REASON <input type="checkbox"/> RECOMMENDED. <input type="checkbox"/> DISBONDED. <input checked="" type="checkbox"/> CONTINUITY. <input type="checkbox"/> ZERO DRIFT.	P: Primary B: Backup	LOCATION: 1 2 3 4 5 6 7			
	ACTIVATED: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>					
	REPLACED: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>					
MAIL THIS CARD TO:		AIRCRAFT STRUCTURAL LIFE SURVEILLANCE BRANCH ATTN: AIR-4.3.3.4 BLDG 2187 SUITE 2320A NAVAL AIR SYSTEMS COMMAND 48110 SHAW ROAD UNIT 5 PATUXENT RIVER MD 20670-1906				
NAVAIRHQ DIRECTIVES WEB SITE: HTTP://www.nalda.navy.mil/instructions/default.cfm PREVIOUS ISSUES OF THIS FORM MAY BE USED UNTIL DEPLETED.						

Attachment (F)
Enclosure (5)

FLIGHT LOADS / LAUNCH / LANDING DATA - SIDE 1

REFER TO NAVAIRINST
13920.1H, ENCLOSURE
(5) FOR INSTRUCTIONS
ON HOW TO PROPERLY
COMPLETE THIS FORM.

PART A: AIRCRAFT INFORMATION

TOTALS ARE SINCE AIRCRAFT MANUFACTURE, NOT MONTHLY TOTALS

REPORT TYPE

☐ MONTHLY.☐ FLDR REMOVED.☐ FLDR INSTALLED.☐ STRAIN GAGE CALIB.☐ STRAIN GAGE CHANGE.

REPORT DATE	AIRCRAFT T/M/S	AIRCRAFT BUNO	REPORTING ACTIVITY/ORGANIZATIONAL CODE
SHIP ARRESTS AV-8: TOTAL SHIP	SHIP T & G AV-8: VSTOL VERT	SHIP BOLTERS AV-8: VSTOL SLOW	FIELD ARRESTS AV-8: VSTOL VERT ROLL
FCLP/RAST AV-8: FCLP	FIELD LANDINGS AV-8: FLD/FLD T&G	TOTAL LANDINGS	SHIP/FLD CATS AV-8: TRF

TOTAL AIRCRAFT FLIGHT TIME

PART B: COUNTING ACCELEROMETER WINDOW READINGS

1	2	3	4	5	6
7 OR ET	8	9	10	11	12

REMARKS

FLIGHT LOADS / LAUNCH / LANDING DATA - SIDE 2

STRAIN GAGE CALIBRATION REPORT - Part A on Side 1 must also be completed.

PART C	REASON <input type="checkbox"/> RECOMMENDED. <input type="checkbox"/> GAGE REPLACED. <input type="checkbox"/> ROUTINE. <input type="checkbox"/> OTHER.	EXTERNAL STORES WEIGHTS (LBS)	1	2	FLIGHT EVENT NUMBER	
			3	4	TAKE-OFF WEIGHT (LBS)	
			5	6	TAKE-OFF CG (IN.)	
			7	8	LANDING WEIGHT (LBS)	
			9	10	FLIGHT DURATION (HOURS)	

STRAIN GAGE CHANGE REPORT - Part A on Side 1 must also be completed.

PART D	REASON																		
	<input type="checkbox"/>	RECOMMENDED.	P: Primary B: Backup	LOCATION:		1		2		3		4		5		6		7	
	<input type="checkbox"/>	DISBONDED.		P B		P B		P B		P B		P B		P B		P B			
	<input type="checkbox"/>	CONTINUITY.		ACTIVATED:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	ZERO DRIFT.		REPLACED:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

MAIL THIS
CARD TO:

AIRCRAFT STRUCTURAL LIFE SURVEILLANCE BRANCH
ATTN: AIR-4.3.3.4 BLDG 2187 SUITE 2320A
NAVAL AIR SYSTEMS COMMAND
48110 SHAW ROAD UNIT 5
PATUXENT RIVER MD 20670-1906

INTERNET DOCUMENT INFORMATION FORM

A . Report Title: Procedures for Submitting Flight Loads, Launch, and Landing Data for the Structural Appraisal of Fatigue Effects Program

B. DATE Report Downloaded From the Internet: 11/28/00

C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #):
Department of the Navy
Naval Air Systems Command
Naval Air Systems Command, Headquarters
47123 Buse Road, Unit #IPT
Patuxent River, MD 20670-1547

D. Currently Applicable Classification Level: Unclassified

E. Distribution Statement A: Approved for Public Release

F. The foregoing information was compiled and provided by:
DTIC-OCA, Initials: __VM__ Preparation Date 11/28/00

The foregoing information should exactly correspond to the Title, Report Number, and the Date on the accompanying report document. If there are mismatches, or other questions, contact the above OCA Representative for resolution.